

Abarna_day55

```
#include <stdio.h>
```

```
void sort_descending(int arr[], int n) {  
    int i, j, temp;  
    for (i = 0; i < n - 1; i++) {  
        for (j = 0; j < n - i - 1; j++) {  
            if (arr[j] < arr[j + 1]) {  
                temp = arr[j];  
                arr[j] = arr[j + 1];  
                arr[j + 1] = temp;  
            }  
        }  
    }  
}
```

```
int main() {  
    int n, i, sum = 0;  
  
    printf("Enter the size of arrays: ");  
    scanf("%d", &n);  
  
    int X[n], Y[n];  
  
    printf("Enter elements of array X: ");  
    for (i = 0; i < n; i++) {  
        scanf("%d", &X[i]);  
    }  
  
    printf("Enter elements of array Y: ");  
    for (i = 0; i < n; i++) {  
        scanf("%d", &Y[i]);  
    }  
  
    sort_descending(X, n);  
    sort_descending(Y, n);  
  
    for (i = 0; i < n; i++) {  
        sum += X[i] * Y[i];  
    }  
  
    printf("Maximum scalar product: %d\n", sum);  
  
    return 0;  
}
```